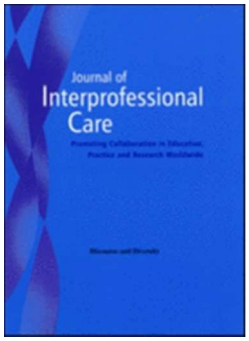


# Understanding Interprofessional Education as an intergroup encounter: The use of contact theory in programme planning

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# Understanding Interprofessional Education as an intergroup encounter: The use of contact theory in programme planning


## Abstract

A key underlying assumption of interprofessional education (IPE) is that if the professions are brought together they have the opportunity to learn about each other and dispel the negative stereotypes which are presumed to hamper interprofessional collaboration in practice. This paper explores the application of contact theory in IPE with reference to eight evaluation studies (1995-2012) which adopted this theoretical perspective. It proposes that educators should pay explicit attention to an intergroup perspective in designing IPE programmes and specifically to the 'contact variables' identified by social psychologists studying inter-group encounters. This would increase the chances of the planned contact having a positive effect on attitude change.


## Introduction

Reeves and Hean (2013), in this journal, asserted that an understanding and application of theory is necessary for appreciating the nature of interprofessional education, practice and care. They cited an influential review by Freeth and colleagues (2005) to support their view that curriculum design for IPE and its evaluation had failed to employ theory in an explicit manner; instead, educators had relied implicitly on principles from adult learning theories. This paper contributes to conceptual development with reference to Allport's 'contact hypothesis', identified by, Thistlethwaite (2012), Mohaupt et al. (2012) and Barr (2013) as one of the key theoretical perspectives on IPE. We consider the application of this theory and present evidence from evaluation studies informed by this approach. We conclude by offering some specific suggestions for educational initiatives.

## The contact hypothesis

Sixty years ago, while accepting the proposition that the best way to reduce hostility between groups was to bring them together, Allport (1954) nevertheless argued that contact alone was insufficient. In other words, simply putting together a collection of students from different

professions in the classroom – what Carpenter and Dickinson (2008) defined as multiprofessional education (MPE) - would not be enough to produce attitude change. As these authors explained:

> The key difference is that IPE promotes collaborative practice between professions, whilst MPE is simply learning together for whatever reason, including, for example economies of scale in which health professionals share lectures on topics of mutual interest. Whilst a seemingly semantic differentiation, the intent behind the purposes of MPE and IPE programmes are different – which in turn has important implications for determining content, teaching methods and evaluation (p.4)

Allport (1954) proposed as necessary conditions that the groups should have equal status within the contact situation, they should work on common goals, have the support of authorities (institutional support) and finally that they should cooperate with each other. These conditions, together with others discussed below, are referred to as 'contact variables' in the sense that they are hypothesised to account for the extent to which attitude change may take place.

Allport's 'contact hypothesis' has been tested in a number of laboratory and field studies; results are generally supportive and consequently it is referred to here as a theory. Hewstone and Brown's (1986) review identified four additional factors: that participants in the contact have positive expectations; that the joint work is successful; there is a focus on both similarities and differences between members of the groups; and finally, that conflicting group members perceive each other 'typical' members of the other group ('outgroup'). However, a limitation of the theory is that it does not specify *how* change will occur. While intergroup attitudes are influenced by many factors, including historical, social and political ones, cognitive processes, notably stereotyping, also play an important role.

Hewstone and Brown (1986) outlined the essential aspects of stereotyping. These are firstly, that other individuals are categorised, usually based on some observable characteristic such as gender, race or perhaps professional uniform. A set of attributes is then ascribed to most, if not all, of the members of that category. Everyone who belongs to that category is then assumed to be similar to each other and different from other groups. Thus outgroups (those groups of which

we are not members) are generally seen as homogeneous while the ingroup (groups to which we perceive we belong) is seen as more diverse. Stereotypes generate expectations and we tend to 'see' behaviour that confirms our expectations, even when it is absent. As Hewstone and Brown (1986) put it, contact situations can easily become self-fulfilling prophecies. This may explain why contact alone is not enough to change intergroup attitudes.

Pettigrew (1998) proposed that contact improves attitudes between groups by providing opportunities to learn about outgroups. Not surprisingly, Rothbart and John (1985) showed that positive change only occurred when the outgroup's behaviour was not in line with the traditional stereotype (e.g. that the surgeons taking part in IPE revealed themselves to be caring and not at all arrogant) but also that these outgroup members were seen as being typical (of surgeons in general). Similarly, contact may provide insight into how others see us, and this may lead to a reappraisal of how we see ourselves. For example, we may not have thought about our own profession as being particularly knowledgeable, but faced by other professionals who clearly think this, we may revise our opinions. Furthermore, perceptions of one's own group, the 'ingroup' are reshaped in this way; this can lead to a less narrow-minded view of the outgroup ('they obviously value what I have to say. Maybe they are not as ignorant as I first thought.')

The role of emotions in intergroup encounters and participants' should be recognised. For example, Carpenter and Hewstone (1996) reported that some medical students were apprehensive about IPE sessions with social work students, anticipating 'doctor bashing'; conversely, social work students acknowledged apprehension because they were 'prejudiced' about doctors. Similarly, Ajjawi et al. (2009) documented dental students' discomfort and marginalisation in IPE with medical students. Conversely, it may be proposed that positive emotions can be facilitated by the development of friendships between participants.

Generalisation beyond the immediate contact situation is vital if the impact of intergroup contact is to have lasting consequences. Of course, when applied to IPE it is hoped that positive attitude

change about other professionals engendered through the programme will extend to other professionals with whom they work.

**Social Identity Theory**

There is however no one accepted view of how best to achieve generalisation. Brown (2000) identified models, all forms of the contact hypothesis and all based upon Social Identity Theory (Tajfel & Turner, 1986). These authors proposed that we derive our identity from our membership of social groups and further that we prefer to have a positive rather than a negative identity. Therefore, it is argued that we will perceive the ingroup more positively than the outgroups. Social Identity Theory would emphasise a group-based rather than individualistic approach to achieving integration and collaboration between professionals in health and social care (Kriendler, Dowd, Starr & Gottschalk, 2012). For example, instead of nurses and social workers perceiving themselves by professional group, a common categorisation of 'mental health workers' could be emphasised during intergroup contact situations. However, this new identity is unlikely to be accepted unless it was more positively valued that the original professional identity. Thus the identity 'psychological therapist' might be more attractive than 'mental health worker', because it suggests higher status.

Hewstone and Brown (1986) alternatively proposed that salience is maintained for the original groups and contact conditions are optimised. This model attempts to maximise the *group* nature of the contact as opposed to the *personal* nature. In this way, contact should promote generalisation across members of the target outgroup. Brown and Hewstone (1986) argued that it is important to protect the distinctiveness of groups involved in contact for two reasons. Firstly, the salience of group boundaries can promote generalisation across members of the outgroup and secondly, each group should be seen as distinct in terms of the expertise and experience it brings to the contact situation. This should result in '*mutual intergroup differentiation*' in which groups recognise and value each others' strengths and weaknesses.

Hewstone and Brown (1986) went on to assert that a mutual recognition of superiorities and inferiorities would be reflected in intergroup stereotypes. They hypothesised that after intergroup contact which emphasised mutual intergroup differentiation, each group would view itself positively and hold positive stereotypes of outgroups. The positive stereotypes of the outgroup would be consistent with those groups' own views of their profession (autostereotypes). In summary, this model argues that after successful intergroup contact each group is seen as it wishes to be seen and desired differences between groups are highlighted.

The literature reviewed thus far suggests some conditions for changing attitudes in IPE which we perceive as an intergroup encounter. First, there should institutional support for participation; this should be from the people or organisation that the participants feel to be influential. For prequalification students this may be college tutors; for practicing professionals, it may be their colleagues, managers and/or professional bodies. Secondly, participants should have positive expectations. While it is important that similarities between the groups are emphasised, differences should also be explored. The contact situation should emphasise the equality of participants on the programme even if they have different status outside (e.g. doctors and nurses). The learning atmosphere should be cooperative rather than competitive. Additionally, joint work should be successful if intergroup attitudes are to improve.

For positive attitude change to then be generalised from the outgroup members involved in the contact to all outgroup members, the members involved in the contact situation must be perceived as typical. Thus for example, the nurses on a programme should be seen as representative of nurses whom social workers and occupational therapists encounter in their day to day working if they are to change their attitudes of nurses in general. The contact situation must also allow for both intergroup and interpersonal contact so that participants can relate to outgroup members both as individuals and as representatives of their professions.

## Application

We now review studies published between 1995 and 2012 which adopted this theoretical perspective in the design and/or evaluation of IPE programmes.

*The Bristol Studies*

Carpenter and Hewstone reported three empirical investigations of attitude change in IPE for social work, medical and nursing students at Bristol University (Hewstone, Carpenter, Franklyn-Stokes & Routh, 1994; Carpenter 1995a; Carpenter 1995b; Carpenter & Hewstone, 1996). The programmes, which were compulsory, were designed in the light of the theoretical framework described above in that every effort was made to incorporate the 'contact variables'. Thus, in the case of the medical students, the chair of the relevant department was asked to demonstrate *institutional support* for the programme by attending and speaking at the introductory session. The importance of the programme was stressed in terms of future professional practice and *positive expectations* were encouraged by depicting it as enjoyable and informative. Each group was informed about the other's educational background and told that all participants were in the final year of their professional training (implying *equal status* in the programme).

Participants attended the equivalent of two and a half days of shared learning events. Each event was led by a doctor and a social worker or nurse partnership. These facilitators were carefully briefed so that each understood the educational principles on which the programme was based and a detailed structure for the session could be worked out. In all cases the learning objectives were similarly stated, to:

• Examine similarities and differences in the attitudes and skills of members of the other profession;

• Acquire a knowledge of their respective roles and duties with respect to the topic under consideration;

• Explore methods of working together co-operatively and effectively in the best interests of their patients/clients.

Each event was carefully structured to provide opportunities for students to undertake *successful joint work* in a *co-operative* atmosphere. The students worked together in interprofessional pairs, for example planning their approach to a case, and also in groups, for example, explaining and discussing their respective roles. *Group membership was emphasized* throughout: students were asked to discuss or act 'as a doctor/social worker/nurse'. The group leaders were asked to draw attention to *differences as well as similarities* and to provide *positive feedback* on ideas presented by the students.

In these programmes, mutual intergroup differentiation was evident: participants were prepared to acknowledge the superiority of the outgroup on some dimensions. For example, Carpenter (1995b) reported that both medical and nursing students demonstrated strong positive and negative stereotypes: nurses were seen, by themselves and the medical students, as caring, dedicated and good communicators, whereas the medics were seen as confident, both by themselves and the nurses. It is worth noting that these stereotypes were already strong despite neither group having at the time commenced their professional careers. This suggests that stereotypes are formed at a very early stage. Hind *et al* (2003) and Hean, Clark, Macleod, Adams and Humphris (2006) investigating health and social work undergraduates, and Mandy et al (2004), with physiotherapy and podiatry students, similarly found that clear and distinct professional stereotypes were present at an early stage of professional development.

At the end of the Bristol programmes, participants reported statistically significant increases in their self-rated understanding of the knowledge and skills, roles and duties of the other profession. Further, there was encouraging evidence of changes in interprofessional stereotypes, with a reduction in the attribution of negative characteristics to the outgroups and an increase in those characteristics which were valued by the outgroup members. For example, at the end of the programme social work students saw medical students as significantly more caring and less

detached, while the medics saw the social workers as less dithering and gave them significantly higher ratings for breadth of life experience. These positive results were associated with students' ratings of the design features of the programme, supporting the relevance of the contact variables.

There was some evidence that nurses, who were all women, were more inclined to operate on an interpersonal rather than an intergroup model of contact (Carpenter 1995a). Thus, they were more likely to emphasise similarities than doctors and to see the medics as individuals rather than as typical members of a group. As one nursing student recommended when asked to consider how doctors and nurses might cooperate more effectively:

> "Try to forget stereotypes and see each doctor/nurse as an individual. We don't just communicate with a "doctor" or a "nurse". There is a human being underneath the uniform!" (Carpenter, 1995a, p.272).

The Bristol programmes were short (between one day and one week), involved students rather than qualified and experienced professionals, and the outcomes were not followed up into practice. In other words, changes in attitudes may have been insubstantial and transitory.

*The Birmingham Study*

Carpenter and colleagues (2000) subsequently investigated stereotypes and stereotype change in a much longer (two-year, part time) programme of IPE for experienced, qualified, community mental health professionals. At the start, there was considerable evidence of professional stereotyping. In general, the nurses, occupational therapists, social workers and other participants were reasonably positive about each other, giving themselves and each other moderately high ratings for interpersonal skills, professional competence, and life experience. However, psychiatrists and psychologists, who were barely represented on the course, received lower ratings for practical skills and life experience, and were thought to be poor team players. There was some evidence to support the hypothesis of mutual intergroup identification. For example, social workers, nurses and occupational therapists were willing to concede superiority

on leadership and academic rigour to the psychiatrists and psychologists, but saw themselves as clearly superior in terms of communication, interpersonal and practical skills.

There was however little evidence of change in these stereotypes. Positive stereotypes were not strengthened appreciably, nor were negative stereotypes reduced. Having examined possible reasons, Barnes and colleagues concluded first, that the students tended not to see fellow course members as 'typical' members of the other mental health professions and therefore did not generalise their positive experiences of fellow students to their professions as a whole. In particular, students considered that the main differences between themselves and their colleagues who did not elect to join the programme were their open mindedness and willingness to change. It should also be noted that because there were so few psychiatrists and psychologists on the programme, there was little opportunity for students' negative stereotypes to be disconfirmed. When the same measures of stereotypes were used with a sample of colleagues who were members of their home community mental health teams, but who were not attending the programme, the authors found that, compared to course participants, team colleagues gave significantly more favourable ratings to psychiatrists and psychologists on a number of dimensions.

One explanation could be that the contexts in which the ratings were made were different: those on the course might have been thinking about psychiatrists and psychologists in general, whereas their team colleagues might have been thinking about the psychiatrists and psychologists in their teams. This explanation draws on an interpersonal perspective. An alternative, intergroup perspective would suggest that the programme participants were actually an atypical group, whose members also saw themselves as different from those who did not attend the programme. Even at the beginning of the programme, participants scored significantly higher for 'role conflict' than team colleagues. Barnes et al (2000) also noted that there was evidence of participants negatively stereotyping those who did not come on the programme and how they claimed a positively valued distinctiveness for the programme group. In group interviews, participants suggested that they and their fellow participants were open minded and willing to

change, in implied contrast to narrow minded and conservative colleagues who did not come on the course.

Second, there was evidence that students did not perceive the programme as providing the conditions for positive attitude change required by contact theory. In particular, the requirement to explore differences as well as similarities was absent and there was little joint work This was confirmed by participant observation which showed participants sticking together with members of their own professions (Barnes et al, 2000). Commenting on the findings of this study Kreindler et al (2012) observed:

> "…it is not always possible to create equal-status contact between unequal-status groups…Second, even if an equal status "bubble" can be created, attitudes created under such artificial conditions may evaporate when participants return to the real world." (p.363).

These authors cited Ajjawi Hyde, Roberts and Nisbit's (2009) analysis of an unsuccessful IPE programme for medical and dental students in Australia. They pointed out the 'marginalisation' reported by dental students who felt treated as 'second class citizens' because the programme had evidently been organised to suit the needs of the medical students.

Nevertheless, Kriendler et al. (2012) make an important observation in their commentary. They criticised Carpenter et al for being preoccupied with "decontextualized" (interprofessional) stereotypes and for taking an individualistic approach:

> …which locates the problem in personal attitudes and stereotypes, [which] is incompatible with a group-based approach. That latter, because it views stereotypes as a *symptom* [original emphasis] of a system of group relations which entrenches intergroup conflict, sees the [practice] context as the necessary target of intervention. (p.363)

Kriendler and colleagues (2012) believed that the evaluators had downplayed the success of the programme in terms of improvements in team functioning and client outcomes; as they observed, Carpenter and colleagues (xxxx) study is a rare example of improvements in clients' lives attributable to a programme of IPE.

*Recent studies*

Ajjawi, et al. (2009) and Furness, Armitage and Pitt (2012) used contact theory to explore disappointing results of IPE programmes. The former used focus groups and interviews with students and staff. The unequal status of participants was noted above, but, it is also clear that the learning was actually a form of MPE (large group lectures and laboratory sessions) and did not involve learning together to work together, as in IPE. Students did have small problem based learning (PBL) groups but, perversely, these were uni-professional. As one respondent pointed out, "…when you are forced into a PBL group, that's when you actually start to make friendships…(p.241).

Furness and colleagues' (2012) evaluation was of a 'real world' practice-based approach to learning for health and social care professionals. Overall, participants were disappointed with the programme, feeling that it 'never really got off the ground' (p.86). Thinking about the contact variables, the evaluators identified lack of 'institutional support' which '…trickled down through the organisation from managers to staff to students.' (p.88). Secondly, while IPE was 'a lovely idea in theory', it was seen as 'just another initiative' and expectations were low. Third, these low expectations and poor engagement by practitioners undermined the creation of the required co-operative atmosphere. Finally, without the necessary management support, the facilitators were unsuccessful in bringing students together to engage in joint work.

Both studies employed the contact hypothesis to analyse reasons for failure. Mohaupt et al. (2012) designed their IPE programme with the 'contact variables' in mind. Theirs was a shorter (eight hour) facilitated classroom-based programme involving case simulations and debriefing as well as didactic presentations. Participants were volunteers and the outcome measure assessed attitudes to collaborative education and practice rather than interprofessional stereotypes. There was evidence of positive changes from the start to end of the programme, although actual differences were 'very low', probably because the volunteers' baseline scores were already very positive (p.373).

Of course, there are many examples of successful IPE programmes which achieve a range of outcomes in addition to attitude change (see Carpenter and Dickinson, 2008 for a review). However, one of the limitations of the studies discussed in this paper so far is the lack of a control or comparison groups in the assessment of attitude change.

Lindqvist, Duncan, Shepstone, Watts and Pearce (2005) reported a pre-qualification IPE programme for first year students from six different health professions working together in small cross-professional groups discussing issues relating to interprofessional working. At the outset the students already had clear stereotypes. These views were measured at the start and end of the programme and contrasted with a comparison group who had not received IPE. The students in the intervention group tended to view the different health professionals as being more 'caring' and less 'subservient' at the end of the intervention (p. 515). However, this study was relatively small scale and the participants were self-selecting and probably more open to the influences of such a programme.

Finally, Ateah et al. (2011) attempted a more ambitious experimental design, aiming to randomly allocate medical and health care students to one of three groups: classroom-based discussions about interprofessional practice, an interprofessional practice placement ('immersion') and a non-intervention control group. Implementing the research design proved difficult and intergroup comparisons were statistically underpowered but there was evidence that interprofessional attitudes improved in both intervention groups.

**Discussion**

Barr's (2013), review, noted the 'mixed results' of evaluation studies which employed contact theory and asserted that, "The credence of contact theory to modify relationships between professional groups, therefore, remains tentative…" (p.5). Of course, theories in themselves cannot modify relationships, they are only more or less useful in their application. So, what can these evaluation studies tell us?

We suggest (1) that professional stereotypes, both positive and negative, are readily elicited from health and social work students and professionals, and also that there is a possibly a general consensus as to what these are; (2) there is some evidence that these stereotypes can be changed, at least in the short term, and with prequalification students. (3) these changes seem to be associated with the 'contact variables' (Hewstone and Brown, 1986) although we cannot say which of these conditions are 'essential' and which are 'facilitative'. (4) In the relative absence of these conditions, attitude change *may* not take place or be generalised to the workplace. The perceived typicality of course participants seems to be quite important.

We argue that educators should take account of the contact variables in the design and evaluation of IPE. Thus, following Hean and Dickinson (2005, p. 484) we advise the following. First, ensuring that participants in the programme have *equal status*. This may be easier to achieve in pre-qualifying IPE, but status also derives from the number of years students have spent at the university and from the specific subject knowledge and expertise they have attained. Second, developing small group classroom exercises or tasks on practice placements in which participants see *common goals* and agree on their importance. Third, ensuring that *institutional support* for the programme is obvious to the students. They are likely to be convinced by such factors as the involvement of high status staff, good quality teaching facilities and prominent place in the curriculum. Formal assessment of learning is also an important indicator (and motivator). Fourth, engender *positive expectations*. For example, by talking to student representatives, recruiting 'ambassadors' who have previously experienced the programme and preparing good promotional material. Fifth, promote *generalisation* by asking participants to take on the role of their professional discipline in IPE workshops. This is not a problem for qualified professionals, but can be difficult for first year students who may not know enough to do this convincingly. Rather than push them into a situation in which they feel uncomfortable and possibly resistant, it may be better to de-emphasise this aspect. Sixth, ensure, as far as possible, balanced numbers of participants. A solo representative of a profession is likely to feel outnumbered and marginalised, particularly if this person also feels disadvantaged by virtue of their gender and ethnicity. Whether or not the objectives of an IPE programme are explicitly to tackle inter professional stereotyping and promote attitude change, we believe it crucial to recognise and plan how to deal with the intergroup aspects of the encounter. Finally, it is evident

that there are many gaps in our understanding of attitudinal change through IPE. In addition to knowing more about essential and facilitative contact variables, it would be very helpful to understand *how* attitude change occurs in IPE encounters.

**Declaration of interests**

The authors report no conflicts of interest. The authors alone are responsible for the writing and content of this paper.

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